Use of masks in the community during a pandemic of influenza

Questions and Answers

Influenza virus is transmitted from person to person by large respiratory droplets that are made during coughing and sneezing. Droplets can travel about 3 feet and can spread influenza when they land in the mouth, eyes or nose of others who are close by. Droplets that fall out on surfaces and objects may also be a source of infection.

Masks and respirators are only one of several strategies used to prevent the spread of influenza in health care settings. These devices have not been used routinely in the community setting. As communities plan for pandemic influenza, questions have arisen about the role of masks and respirators to protect the general public.

There is not a simple answer to this question, and recommendations may change as we learn more about influenza and how it transmitted. However, at the present time, **the Alaska Division of Public Health does not have a recommendation for or against individuals and families purchasing masks or respirators.**

What kinds of masks are used?

Medical mask

Medical masks, also called surgical or procedure masks, are designed to *prevent the wearer from spreading germs* to others through sneezing and coughing. These masks fit loosely over the nose and mouth and do not offer good protection against viruses because small particles that can pass around edges or through the meshwork of the mask.

Respirator

Respirators often look like medical masks, but they are designed to *protect the wearer from inhaling very small particles*. Some respirators are made for single use and some are reusable, with filter cartridges that must be replaced periodically. Respirators are used in the medical setting to protect health care providers from airborne germs. Each individual must undergo a procedure called *fit testing* to be certain the respirator will be effective. Respirators labeled as "NIOSH-certified" N95, N99 or N100 protect against very small particles, although no respirator can ever guarantee full protection.[1] (N95 respirators are essentially the same as dust-mist-fume respirators.)

How do masks work?

Masks and respirators are made of a meshwork of fibers. They both work by trapping small particles (and germs) inside the meshwork.

- Medical masks fit loosely. Although they are good for trapping droplets when the wearer coughs or sneezes, they allow inhaled air to flow around the edges of the mask.
- Respirators fit tightly so that all inhaled air flows through the fiber meshwork. If fitted correctly no air flows around the edges of the respirator. Respirators do not seal properly to faces of men with beards and they are not made in children's sizes in the U.S.

[1] NIOSH the National Institute of Occupational Safety and Health.

Where are masks and respirators routinely used?

- Health care workers wear medical masks during surgical procedures to protect patients from infection.
- Patients with infections that spread by coughing or sneezing wear medical masks when they are around others in a health care facility.
- Health care workers wear respirators when caring for patients with infectious diseases that are spread through the air.

Why aren't experts recommending that everyone have masks?

Masks and respirators must be used correctly, or they offer no protection. Because these devices are uncomfortable to wear for long periods, people often wear them incorrectly. They must always cover the nose, and there should be no gaps between the sides of the mask and the face.

Although health care providers routinely use masks and respirators to prevent spread of respiratory infections, neither of these devices have been tested for their ability to protect people from influenza viruses. Public health officials will continue to review and update recommendations on the use of masks and respirators during pandemic influenza as more information becomes available. New information will be posted at http://www.pandemicflu.alaska.gov.

What can you do to prevent the spread of influenza and other respiratory virus infections?

√ Cover your nose and mouth when coughing or sneezing. Cough or sneeze into your upper sleeve if you don't have a tissue.

√ Use disposable tissues to contain respiratory secretions, and dispose of used tissues in a waste receptacle after use.

√ Wash hands with soap and water, or use an alcohol-based hand rub or antiseptic handwash if running water is not available. Wash after each contact with respiratory secretions or contaminated objects.

√ Don't share drinking glasses, eating utensils, toothbrushes, water bottles, or other drinks.

√ Stay at home if you have been diagnosed with influenza or if you have a fever and cough. Stay at home until your fever is gone and your cough is improving. If you have to go out in public or to work while you are still sick, wear a medical mask. Medical masks can be found at pharmacies, medical supply centers, and hardware stores.

√ Clean surfaces such as door handles, handrails, eating surfaces, toys, and phones frequently with household cleaner or a bleach solution (1/4 cup bleach with 1 gallon of water).

√ Use face masks provided in your health care provider's office or clinic waiting room if you have a cough.